

The following Listing of the Claims will replace all prior versions and all prior listings of the claims in the present application:

Listing of The Claims:

1. (Currently Amended): An isolated Tumstatin ~~fragment~~ polypeptide comprising amino acid residues 77-95 of SEQ ID NO:10 of SEQ ID NO:33, or a fragment thereof, wherein the amino acid sequence of said fragment consists of SEQ ID NO:45, and having wherein said polypeptide or fragment thereof, has the ability to inhibit tumor growth.
2. (Currently Amended) ~~An~~ The isolated polypeptide of claim 1, having the amino acid sequence of SEQ ID NO:37.
3. (Currently amended) The isolated polypeptide or fragment thereof ~~fragment~~ of Claim 1, wherein the polypeptide or fragment thereof ~~fragment~~ is reduced.
4. (Currently amended) The isolated polypeptide or fragment thereof ~~fragment~~ of Claim 1, wherein the polypeptide or fragment thereof ~~fragment~~ is alkylated.
5. (Currently amended) The isolated polypeptide or fragment thereof ~~fragment~~ of Claim 1, wherein the polypeptide or fragment thereof ~~fragment~~ is oxidized.
6. (Currently Amended) An isolated ~~mutated fragment comprising amino acid residues 77-95 of SEQ ID NO:10, mutated Tumstatin polypeptide of SEQ ID NO:33, or a fragment thereof, wherein said fragment comprises SEQ ID NO:45, wherein said polypeptide or fragment thereof further comprises one to five amino acid substitutions wherein one or more, and five or fewer, amino acids have been substituted, and wherein the mutated fragment has the ability to inhibit tumor growth.~~
7. (Currently amended) The polypeptide or fragment thereof, isolated-mutated fragment of Claim 6, wherein the polypeptide or fragment thereof, is reduced.
8. (Currently amended) The polypeptide or fragment thereof, isolated-mutated fragment of Claim 6, wherein the polypeptide or fragment thereof, is alkylated.
9. (Currently amended) The polypeptide or fragment thereof, isolated-mutated fragment of Claim 6, wherein the polypeptide or fragment thereof, is oxidized.
10. (Currently Amended) The isolated-~~fragment~~ polypeptide of Claim 1, wherein the polypeptide has an amino acid sequence of ~~fragment is~~ SEQ ID NO:38.

11. (Currently Amended) The isolated-~~fragment~~ polypeptide of Claim 1, wherein the polypeptide has an amino acid sequence of ~~fragment~~ is SEQ ID NO:39.
12. (Currently Amended) The isolated-~~fragment~~ polypeptide of Claim 1, wherein the polypeptide has an amino acid sequence of ~~fragment~~ is SEQ ID NO:40.
13. (Currently Amended) The isolated-~~fragment~~ polypeptide of Claim 1, wherein the polypeptide has an amino acid sequence of ~~fragment~~ is SEQ ID NO:41.
14. (Currently Amended) The isolated-~~fragment~~ polypeptide of Claim 1, wherein the polypeptide has an amino acid sequence of ~~fragment~~ is SEQ ID NO:42.
15. (Currently Amended) An isolated Tumstatin ~~fragment comprising amino acid residues 77-95 of SEQ ID NO:10~~, polypeptide of SEQ ID NO:33 or a fragment thereof, wherein said fragment comprises SEQ ID NO:45, and wherein said polypeptide or fragment thereof, has having the ability to inhibit angiogenesis.
16. (Currently amended) The isolated-~~fragment~~ polypeptide of Claim 15, wherein the polypeptide ~~fragment~~ is SEQ ID NO:37.
17. (Currently amended) The isolated ~~fragment~~ polypeptide of Claim 15, wherein the ~~fragment~~ polypeptide is reduced.
18. (Currently amended) The isolated ~~fragment~~ polypeptide of Claim 15, wherein the ~~fragment~~ polypeptide is alkylated.
19. (Currently amended) The isolated ~~fragment~~ polypeptide of Claim 15, wherein the ~~fragment~~ polypeptide is oxidized.
20. (Currently Amended) An isolated ~~mutated fragment comprising amino acid residues 77-95 of SEQ ID NO:10~~, mutated Tumstatin polypeptide of SEQ ID NO:33, or a fragment thereof, wherein said fragment comprises SEQ ID NO:45, wherein said polypeptide or fragment thereof, further comprises one to five amino acid substitutions wherein one or more, and five or fewer, amino acids have been substituted, and wherein the mutated ~~fragment~~ polypeptide has the ability to inhibit angiogenic activity.
21. (Currently amended) The isolated mutated ~~fragment~~ polypeptide of Claim 20, wherein the ~~fragment~~ polypeptide is reduced.

22. (Currently amended) The isolated mutated ~~fragment~~ polypeptide of Claim 20, wherein the ~~fragment~~ polypeptide is alkylated.
23. (Currently amended) The isolated mutated ~~fragment~~ polypeptide of Claim 20, wherein the ~~fragment~~ polypeptide is oxidized.
24. (Currently amended) The isolated ~~fragment~~ polypeptide of Claim 20, wherein the ~~fragment~~ polypeptide is SEQ ID NO:38.
25. (Currently amended) The isolated ~~fragment~~ polypeptide of Claim 20, wherein the ~~fragment~~ polypeptide is SEQ ID NO:39.
26. (Currently amended) The isolated ~~fragment~~ polypeptide of Claim 20, wherein the ~~fragment~~ polypeptide is SEQ ID NO:40.
27. (Currently amended) The isolated ~~fragment~~ polypeptide of Claim 20, wherein the ~~fragment~~ polypeptide is SEQ ID NO:41.
28. (Currently amended) The isolated ~~fragment~~ polypeptide of Claim 20, wherein the ~~fragment~~ polypeptide is SEQ ID NO:42.
29. (Currently Amended): An isolated Tumstatin fragment of SEQ ID NO:33 or a fragment thereof comprising the amino acid sequence of SEQ ID NO:45, comprising amino acid residues 77-95 of SEQ ID NO:10, and having the ability to inhibit protein synthesis in endothelial cells.
30. (Currently amended) The isolated ~~fragment~~ polypeptide of Claim 29, wherein the ~~fragment~~ polypeptide is SEQ ID NO:37.
31. (Currently amended) The isolated ~~fragment~~ polypeptide of Claim 29, wherein the ~~fragment~~ polypeptide is reduced.
32. (Currently amended) The isolated ~~fragment~~ polypeptide of Claim 29, wherein the ~~fragment~~ polypeptide is alkylated.
33. (Currently Amended) The isolated ~~fragment~~ polypeptide of Claim 29, wherein the ~~fragment~~ polypeptide is oxidized.
34. (Currently Amended) An isolated ~~mutated fragment comprising amino acid residues 77-95 of SEQ ID NO:10~~, mutated Tumstatin polypeptide having an amino acid sequence of SEQ ID NO:33, or a fragment thereof, wherein said fragment comprises SEQ ID NO:45,

wherein said polypeptide or fragment thereof, further comprises one to five amino acid substitutions ~~wherein one or more, and five or fewer, amino acids have been substituted,~~ and wherein the mutated fragment has the ability to inhibit protein synthesis in endothelial cells.

35. (Currently Amended) The isolated mutated ~~fragment~~ polypeptide of Claim 34, wherein the ~~fragment~~ polypeptide is reduced.
36. (Currently Amended) The isolated mutated ~~fragment~~ polypeptide of Claim 34, wherein the ~~fragment~~ polypeptide is alkylated.
37. (Currently Amended) The isolated mutated ~~fragment~~ polypeptide of Claim 34, wherein the ~~fragment~~ polypeptide is oxidized.
38. (Currently Amended) The isolated ~~fragment~~ polypeptide of Claim 34, wherein the ~~fragment~~ polypeptide is SEQ ID NO:38.
39. (Currently Amended) The isolated ~~fragment~~ polypeptide of Claim 34, wherein the ~~fragment~~ polypeptide is SEQ ID NO:39.
40. (Currently Amended) The isolated ~~fragment~~ polypeptide of Claim 34, wherein the ~~fragment~~ polypeptide is SEQ ID NO:40.
41. (Currently Amended) The isolated ~~fragment~~ polypeptide of Claim 34, wherein the ~~fragment~~ polypeptide is SEQ ID NO:41.
42. (Currently Amended) The isolated ~~fragment~~ polypeptide of Claim 34, wherein the ~~fragment~~ polypeptide is SEQ ID NO:42.
43. (Withdrawn) A method for inhibiting tumor growth in mammalian tissue, the method comprising contacting the tissue with a composition comprising an isolated fragment selected from the group consisting of: (a) SEQ ID NO:10; (b) amino acid 2 through amino acid 245 of SEQ ID NO:10; (c) SEQ ID NO:19; (d) amino acid 1 through amino acid 125 of SEQ ID NO:10; (e) SEQ ID NO:20; (f) SEQ ID NO:21; (g) SEQ ID NO:22; (h) SEQ ID NO:23; (i) SEQ ID NO:25; (j) SEQ ID NO:26; (k) SEQ ID NO:29; (l) SEQ ID NO:30; (m) SEQ ID NO:33; (n) SEQ ID NO:34; (o) SEQ ID NO:37; (p) SEQ ID NO:38; (q) SEQ ID NO:39; (r) SEQ ID NO:40; (s) SEQ ID NO:41; and (t) SEQ ID NO:42.

44. (Withdrawn) The method of Claim 43, wherein the fragment is reduced.
45. (Withdrawn) The method of Claim 43, wherein the fragment is alkylated.
46. (Withdrawn) The method of Claim 43, wherein the fragment is oxidized.
47. (Withdrawn) The method of Claim 43, wherein one or more of the cysteine residues have been substituted for another amino acid.
48. (Withdrawn) A method for inhibiting angiogenic activity in mammalian tissue, the method comprising contacting the tissue with a composition comprising an isolated fragment selected from the group consisting of: (a) SEQ ID NO:10; (b) amino acid 2 through amino acid 245 of SEQ ID NO:10; (c) SEQ ID NO:19; (d) amino acid 1 through amino acid 125 of SEQ ID NO:10; (e) SEQ ID NO:20; (f) SEQ ID NO:21; (g) SEQ ID NO:22; (h) SEQ ID NO:23; (i) SEQ ID NO:25; (j) SEQ ID NO:26; (k) SEQ ID NO:29; (l) SEQ ID NO:30; (m) SEQ ID NO:33; (n) SEQ ID NO:34; (o) SEQ ID NO:37; (p) SEQ ID NO:38; (q) SEQ ID NO:39; (r) SEQ ID NO:40; (s) SEQ ID NO:41; and (t) SEQ ID NO:42.
49. (Withdrawn) A method for inhibiting protein synthesis in one or more mammalian cells, the method comprising contacting the one or more cells with a composition comprising an isolated fragment selected from the group consisting of: (a) SEQ ID NO:10; (b) amino acid 2 through amino acid 245 of SEQ ID NO:10; (c) SEQ ID NO:19; (d) amino acid 1 through amino acid 125 of SEQ ID NO:10; (e) SEQ ID NO:20; (f) SEQ ID NO:21; (g) SEQ ID NO:22; (h) SEQ ID NO:23; (i) SEQ ID NO:25; (j) SEQ ID NO:26; (k) SEQ ID NO:29; (l) SEQ ID NO:30; (m) SEQ ID NO:33; (n) SEQ ID NO:34; (o) SEQ ID NO:37; (p) SEQ ID NO:38; (q) SEQ ID NO:39; (r) SEQ ID NO:40; (s) SEQ ID NO:41; and (t) SEQ ID NO:42.
50. (Withdrawn) A method for inhibiting protein synthesis in one or more mammalian cells, the method comprising contacting the one or more cells with a composition comprising an isolated fragment selected from the group consisting of: (a) SEQ ID NO:2; (b) SEQ ID NO:6; and (c) SEQ ID NO:10.
51. (Currently Amended) The isolated ~~fragment~~ polypeptide of Claim 29, wherein the protein synthesis is cap-dependent protein synthesis.

52. (Withdrawn) The method of Claim 49, wherein the protein synthesis is cap-dependent protein synthesis.
53. (Withdrawn) The method of Claim 50, wherein the protein synthesis is cap-dependent protein synthesis.
54. (Currently Amended) The isolated ~~fragment~~ polypeptide of Claim 29, wherein the endothelial cells express the  $\alpha_v\beta_3$  integrin.
55. (Withdrawn) The method of Claim 49, wherein the mammalian cells express the  $\alpha_v\beta_3$  integrin.
56. (Withdrawn) The method of Claim 50, wherein the mammalian cells express the  $\alpha_v\beta_3$  integrin.
57. (Withdrawn) An isolated peptide of the formula:  $R^1X^1LFX^2NVNX^3V-X^4NFR^2$  (SEQ ID NO:45), wherein  $R^1$  is hydrogen or a peptidyl chain of 1 to 17 amino acids,  $R^2$  is hydrogen or a peptidyl chain of 1 to 12 amino acids, and  $X^1$ ,  $X^2$  and  $X^3$  are individually an amino acid, and wherein said peptide inhibits tumor growth.
58. (Withdrawn) The isolated peptide of Claim 57, wherein  $X^1$  is an amino acid with a basic side chain or an amino acid with an aromatic side chain.
59. (Withdrawn) The isolated peptide of Claim 58, wherein  $X^1$  is phenylalanine, tyrosine, tryptophan, lysine, arginine, histidine, glutamine or asparagine.
60. (Withdrawn) The isolated peptide of Claim 59, wherein  $X^1$  is lysine or phenylalanine.
61. (Withdrawn) The isolated peptide of Claim 57, wherein  $X^2$ ,  $X^3$  and  $X^4$  are independently an amino acid with a hydrophilic side chain or an amino acid with a basic side chain.
62. (Withdrawn) The isolated peptide of Claim 61, wherein  $X^2$ ,  $X^3$  and  $X^4$  are independently cysteine, serine, threonine, aspartic acid or glutamine.
63. (Withdrawn) The isolated peptide of Claim 62, wherein  $X^2$  and  $X^4$  are independently cysteine, serine or aspartic acid and  $X^3$  is cysteine or aspartic acid.
64. (Withdrawn) The isolated peptide of Claim 57, wherein  $X^1$  is phenylalanine, tyrosine, tryptophan, lysine, arginine, histidine, glutamine or asparagine and  $X^2$ ,  $X^3$  and  $X^4$  are independently cysteine, serine, threonine, aspartic acid or glutamine.

65. (Withdrawn) The isolated peptide of Claim 57, wherein  $R^1$  is one amino acid or a peptidyl chain of 2, 3, 4, 5, 6, 7, or 8 amino acid residues.
66. (Withdrawn) The isolated peptide of Claim 65, wherein said amino acid or peptidyl chain represented by  $R^1$  is selected from the group consisting of: (a) P; (b) MP; (c) TMP; (d) TTMP (SEQ ID NO:46); (e) FTTMP (SEQ ID NO:47); (f) RFTTMP (SEQ ID NO:48); (g) QRFTTMP (SEQ ID NO:49); (h) LQRFTTMP (SEQ ID NO:50); (i) KQRFTTMP (SEQ ID NO:51); and (j) a conservative variant of any of (a)-(i).
67. (Withdrawn) The isolated peptide of Claim 57, wherein  $R^2$  is one amino acid or a peptidyl chain of 2, 3, 4, 5, 6, 7, 8 or 9 amino acid residues.
68. (Withdrawn) The isolated peptide of Claim 67, wherein said amino acid or peptidyl chain represented by  $R^2$  is selected from the group consisting of: (a) A; (b) AS; (c) ASR; (d) ASRN (SEQ ID NO:52); (e) ASRND (SEQ ID NO:53); (f) ASRNDY (SEQ ID NO:54); (g) ASRNDYS (SEQ ID NO:55); (h) ASRNDYSY (SEQ ID NO:56); (i) ASRNDYSYW (SEQ ID NO:57); (j) ASRNDYSYWL (SEQ ID NO:58); and (k) a conservative variant of any of (a)-(j).
69. (Withdrawn) The isolated peptide of Claim 57, wherein the peptide is reduced.
70. (Withdrawn) The isolated peptide of Claim 57, wherein the peptide is alkylated.
71. (Withdrawn) The isolated peptide of Claim 57, wherein the peptide is oxidized.
72. (Withdrawn) An isolated peptide of the formula:  $R^1X^1LFX^2NVNX^3V-XNFR^2$  (SEQ ID NO:45), wherein  $R^1$  is hydrogen or a peptidyl chain of 1 to 17 amino acids,  $R^2$  is hydrogen or a peptidyl chain of 1 to 12 amino acids, and  $X^1$ ,  $X^2$  and  $X^3$  are individually an amino acid, and wherein said peptide inhibits angiogenic activity in mammalian tissue.
73. (Withdrawn) The isolated peptide of Claim 72, wherein  $X^1$  is an amino acid with a basic side chain or an amino acid with an aromatic side chain.
74. (Withdrawn) The isolated peptide of Claim 73, wherein  $X^1$  is phenylalanine, tyrosine, tryptophan, lysine, arginine, histidine, glutamine or asparagine.
75. (Withdrawn) The isolated peptide of Claim 74, wherein  $X^1$  is lysine or phenylalanine.
76. (Withdrawn) The isolated peptide of Claim 72, wherein  $X^2$ ,  $X^3$  and  $X^4$  are independently an amino acid with a hydrophilic side chain or an amino acid with a basic side chain.

77. (Withdrawn) The isolated peptide of Claim 76, wherein  $X^2$ ,  $X^3$  and  $X^4$  are independently cysteine, serine, threonine, aspartic acid or glutamine.
78. (Withdrawn) The isolated peptide of Claim 77, wherein  $X^2$  and  $X^4$  are independently cysteine, serine or aspartic acid and  $X^3$  is cysteine or aspartic acid.
79. (Withdrawn) The isolated peptide of Claim 72, wherein  $X^1$  is phenylalanine, tyrosine, tryptophan, lysine, arginine, histidine, glutamine or asparagine and  $X^2$ ,  $X^3$  and  $X^4$  are independently cysteine, serine, threonine, aspartic acid or glutamine.
80. (Withdrawn) The isolated peptide of Claim 72, wherein  $R^1$  is one amino acid or a peptidyl chain of 2, 3, 4, 5, 6, 7, or 8 amino acid residues.
81. (Withdrawn) The isolated peptide of Claim 80, wherein said amino acid or peptidyl chain represented by  $R^1$  is selected from the group consisting of: (a) P; (b) MP; (c) TMP; (d) TTMP (SEQ ID NO:46); (e) FTTMP (SEQ ID NO:47); (f) RFTTMP (SEQ ID NO:48); (g) QRFTTMP (SEQ ID NO:49); (h) LQRFTTMP (SEQ ID NO:50); (i) KQRFTTMP (SEQ ID NO:51); and (j) conservative variant of any of (a)-(i).
82. (Withdrawn) The isolated peptide of Claim 72, wherein R is one amino acid or a peptidyl chain of 2, 3, 4, 5, 6, 7, 8 or 9 amino acid residues.
83. (Withdrawn) The isolated peptide of Claim 82, wherein said amino acid or peptidyl chain represented by  $R^2$  is selected from the group consisting of: (a) A; (b) AS; (c) ASR; (d) ASRN (SEQ ID NO:52); (e) ASRND (SEQ ID NO:53); (f) ASRNDY (SEQ ID NO:54); (g) ASRNDYS (SEQ ID NO:55); (h) ASRNDYSY (SEQ ID NO:56); (i) ASRNDYSYW (SEQ ID NO:57); (j) ASRNDYSYWL (SEQ ID NO:58); and (k) a conservative variant of any of (a)-(j).
84. (Withdrawn) The isolated peptide of Claim 72, wherein the peptide is reduced.
85. (Withdrawn) The isolated peptide of Claim 72, wherein the peptide is alkylated.
86. (Withdrawn) The isolated peptide of Claim 72, wherein the peptide is oxidized.
87. (Withdrawn) An isolated peptide of the formula:  $R^1X^1LFX^2NVNX^3V-X^4NFR^2$  (SEQ ID NO:45), wherein  $R^1$  is hydrogen or a peptidyl chain of 1 to 17 amino acids,  $R^2$  is hydrogen or a peptidyl chain of 1 to 12 amino acids, and  $X^1$ ,  $X^2$  and  $X^3$  are individually an amino acid, and wherein said peptide inhibits protein synthesis in endothelial cells.



88. (Withdrawn) The isolated peptide of Claim 87, wherein  $X^1$  is an amino acid with a basic side chain or an amino acid with an aromatic side chain.
89. (Withdrawn) The isolated peptide of Claim 88, wherein  $X^1$  is phenylalanine, tyrosine, tryptophan, lysine, arginine, histidine, glutamine or asparagine.
90. (Withdrawn) The isolated peptide of Claim 89, wherein  $X^1$  is lysine or phenylalanine.
91. (Withdrawn) The isolated peptide of Claim 87, wherein  $X^2$ ,  $X^3$  and  $X^4$  are independently an amino acid with a hydrophilic side chain or an amino acid with a basic side chain.
92. (Withdrawn) The isolated peptide of Claim 91, wherein  $X^2$ ,  $X^3$  and  $X^4$  are independently cysteine, serine, threonine, aspartic acid or glutamine.
93. (Withdrawn) The isolated peptide of Claim 92, wherein  $X^2$  and  $X^4$  are independently cysteine, serine or aspartic acid and  $X^3$  is cysteine or aspartic acid.
94. (Withdrawn) The isolated peptide of Claim 87, wherein  $X^1$  is phenylalanine, tyrosine, tryptophan, lysine, arginine, histidine, glutamine or asparagine and  $X^2$ ,  $X^3$  and  $X^4$  are independently cysteine, serine, threonine, aspartic acid or glutamine.
95. (Withdrawn) The isolated peptide of Claim 87, wherein  $R^{sup.1}$  is one amino acid or a peptidyl chain of 2, 3, 4, 5, 6, 7, or 8 amino acid residues.
96. (Withdrawn) The isolated peptide of Claim 95, wherein said amino acid or peptidyl chain represented by  $R^1$  is selected from the group consisting of: (a) P; (b) MP; (c) TMP; (d) TTMP (SEQ ID NO:46); (e) FTTMP (SEQ ID NO:47); (f) RFTTMP (SEQ ID NO:48); (g) QRFTTMP (SEQ ID NO:49); (h) LQRFTTMP (SEQ ID NO:50); (i) KQRFTTMP (SEQ ID NO:51); and (j) a conservative variant of any of (a)-(i).
97. (Withdrawn) The isolated peptide of Claim 87, wherein  $R^2$  is one amino acid or a peptidyl chain of 2, 3, 4, 5, 6, 7, 8 or 9 amino acid residues.
98. (Withdrawn) The isolated peptide of Claim 97, wherein said amino acid or peptidyl chain represented by  $R^2$  is selected from the group consisting of: (a) A; (b) AS; (c) ASR; (d) ASRN (SEQ ID NO:52); (e) ASRND (SEQ ID NO:53); (f) ASRNDY (SEQ ID NO:54); (g) ASRNDYS (SEQ ID NO:55); (h) ASRNDYSY (SEQ ID NO:56); (i) ASRNDYSYW (SEQ ID NO:57); (j) ASRNDYSYWL (SEQ ID NO:58); and (k) a conservative variant of any of (a)-(j).

99. (Withdrawn) The isolated peptide of Claim 87, wherein the peptide is reduced.
100. (Withdrawn) The isolated peptide of Claim 87, wherein the peptide is alkylated.
101. (Withdrawn) The isolated peptide of Claim 87, wherein the peptide is oxidized.
102. (Withdrawn) A method for inhibiting tumor growth in mammalian tissue, the method comprising contacting the tissue with a composition comprising the isolated peptide of Claim 57.
103. (Withdrawn) A method for inhibiting angiogenic activity in mammalian tissue, the method comprising contacting the tissue with a composition comprising the isolated peptide of Claim 72.
104. (Withdrawn) A method for inhibiting protein synthesis in one or more mammalian cells, the method comprising contacting the one or more cells with a composition comprising the isolated peptide of Claim 87.
105. (Withdrawn) The isolated peptide of Claim 57, combined with a pharmaceutically-acceptable carrier.
106. (Withdrawn) The isolated peptide of Claim 72, combined with a pharmaceutically-acceptable carrier.
107. (Withdrawn) The isolated peptide of Claim 87, combined with a pharmaceutically-acceptable carrier.